Check List 9(6): 1573–1575, 2013
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ISSN 1809-127X (available at *www.checklist.org.br*)

Check List
Journal of species lists and distribution

NOTES ON GEOGRAPHIC DISTRIBUTION

Geographic distribution notes on *Trimetopon barbouri* Dunn 1930 from western Panama

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ABSTRACT: We document the first records of the small colubrid snake *Trimetopon barbouri* Dunn, 1930, from Coclé Province, Republic of Panama. Comparisons with the type description are presented for one specimen.

Because of their small body size and secretive nature, most species of leaf litter inhabiting snakes are among the least studied groups of Neotropical squamates. This guild of snakes is not commonly encountered or surveyed and virtually all of the aspects of their natural history and geographic distribution are not well understood. Review of the "specimens examined" lists provided for a well-studied Neotropical snake genus, *Rhadinaea* by Myers (1974), demonstrate that many taxa of small snakes are known from very few specimens.

Endemic to the region between the Nicaraguan Depression in the north, and the Chocoan lowlands of northwestern Colombia in the south, the colubrid snake genus *Trimetopon* is composed of a seemingly closely related group of six leaf litter inhabiting species (Wilson and Johnson 2010). These are small, striped or uni-colored snakes with total body length (snout-vent length + tail length) not exceeding 300 mm (Köhler 2008). Although three species of the genus have been recorded from Panama (Köhler 2008; Wilson and Johnson 2010), the majority of specimens of this genus in museum collections are from Costa Rica (Savage 2002). Panamanian specimens of *Trimetopon barbouri* remain rare in collections, being recognized primarily from the former Panama Canal Zone area of central Panama (Myers and Rand 1969; Rand and Myers 1990; Pérez Santos 1999) and one specimen reported from Parque Nacional Altos de Campaña in the Distrito de Capira, Panamá Province (Ibáñez et al. 1996). Two additional species of this genus, *T. pliolepis* and *T. slevini*, have been described or recorded from the mountainous areas along the Costa Rican-Panamanian frontier, where both species reach their southeastern distributional limits. There is a large distance of *ca.* 312 km (straight line distance) separating the distributions of the majority of the members of the genus from *Trimetopon barbouri* in the former Panama Canal Zone (Ibáñez et al. 1996; Köhler 2008).

Trimetopon barbouri, the species focused on in this paper, was described by Dunn (1930) from "Pedro Miguel, Canal Zone, Panama." This community is described as a town at sea level on the Panama Canal at a location *ca.* 10 km NNW of Balboa, in Panamá Province (Siegel and Olson 2008). *Trimetopon barbouri* is the only species of the genus endemic to Panama and aside from inclusion in general survey books and faunal lists little has been published on *T. barbouri* since its description.

In January 2012, JDW found a living specimen (pictures are incorporated into the University of Texas-Arlington Digital Catalog – UTADC 7633, Figure 1) in the community of El Valle de Antón, located in far eastern Coclé Province, very near the Coclé Province-Panamá Province border (08°37'1.16"N, 80°7'12.34"W), at an elevation of *ca.* 710 msl (Locality 1 in Figure 2). The snake was found inside a rotting log in the dry forest on the Pacific versant near the entrance to the Cerro Gaital National Monument. This represents only the second specimen to be found outside of the former Panama Canal Zone and the first record from Coclé Province. The specimen was photographed (Figure 1) and then released. This is a range extension of *ca.* 72 km (straight line distance) from the type locality and *ca.* 22 km from Parque Nacional Altos de Campana.

On 13 June 2012, KD found an individual referable to *Trimetopon barbouri* in the community of La Barrigón, Coclé Province (08°38'2.88"N, 80°35'11.73"W) at *ca.* 400 msl (Locality 2 in Figure 2). This specimen has been catalogued into the La MICA Biological Station-Team Snake Panama collection with the field tag number TSP 2012-100 (collection permit #SE/A-22-12 from ANAM). The specimen was found on the Pacific side of the Continental Divide, dead on the road to Parque Nacional General de División Omar Torrijos Herrera. The site of collection was a gravel road with tall grasses on both sides of the road, and was about 20 m east of the steep, rocky bank of the Río Barrigón. The head of the specimen had been damaged (probably because of being run over by a vehicle), and the body had dehydrated to a considerable extent at the time of discovery, as the day was sunny with temperatures over 30°C. This is a range extension of *ca.* 116 km (straight line distance) from the type locality and 50 km (straight line distance) from the specimen from El Valle de Antón.

The Barrigón specimen was examined as thoroughly as possible, given the condition of the specimen. Scalation

characters provided by Dunn (1930) in the type description are given in parentheses for comparisons. The specimen is a male (male) measuring approximately 160 mm SVL (260 mm), and a tail length of 46 mm (65 mm). Ventrals are 145 (153 in the holotype, range of two apparent paratypes from Ancon 141–149), and subcaudals are 53 (58). Dorsal scale rows are 15 at midbody (15), and 13 at one head length anterior to the vent (not given).

The dorsal color pattern of the Barrigón specimen can be described as follows: the scales of row 1 have a light, almost gold, center that gives the appearance of a light line running through the entire row. The scales of row 2 have a light, cream-colored center, giving the impression of a light line on that row. The upper portion of scale row 2 and the lower part of scale row 3 have a dark stripe. Scales in row 4 have a light colored center. The upper portion of scale row 5 and the lower portion of scale row 6 are dark in color. Unfortunately, the condition of the body of the specimen negates determinations of other characters. However, the above characters match those described for the holotype (Dunn 1930) and the individual found in El Valle de Antón (UTADC 7633).

The head of the specimen is damaged (the snout is destroyed and the left eye is missing), but the following features could be noted. There are two light marks on the edges of the frontal just posterior to eye level. Two nuchal spots are apparent.

Given the seemingly secretive nature of this species of leaf litter snake, the abundance and full geographic distribution is unknown. These records extend the known range to *ca.* 116 km (straight line distance) west of the type locality and *ca.* 70 km west of the formerly westernmost locality at Parque Nacional Altos de Campana. Future surveys of the leaf litter and fell logs likely will turn up additional specimens of this poorly known species and its congeners.

Figure 1. Photograph of *Trimetopon barbouri* collected and released by JDW in El Valle de Antón, Coclé Province, Republic of Panama (Locality 1) in January 2012 (UTADC 7633). A. full body view B. head view.

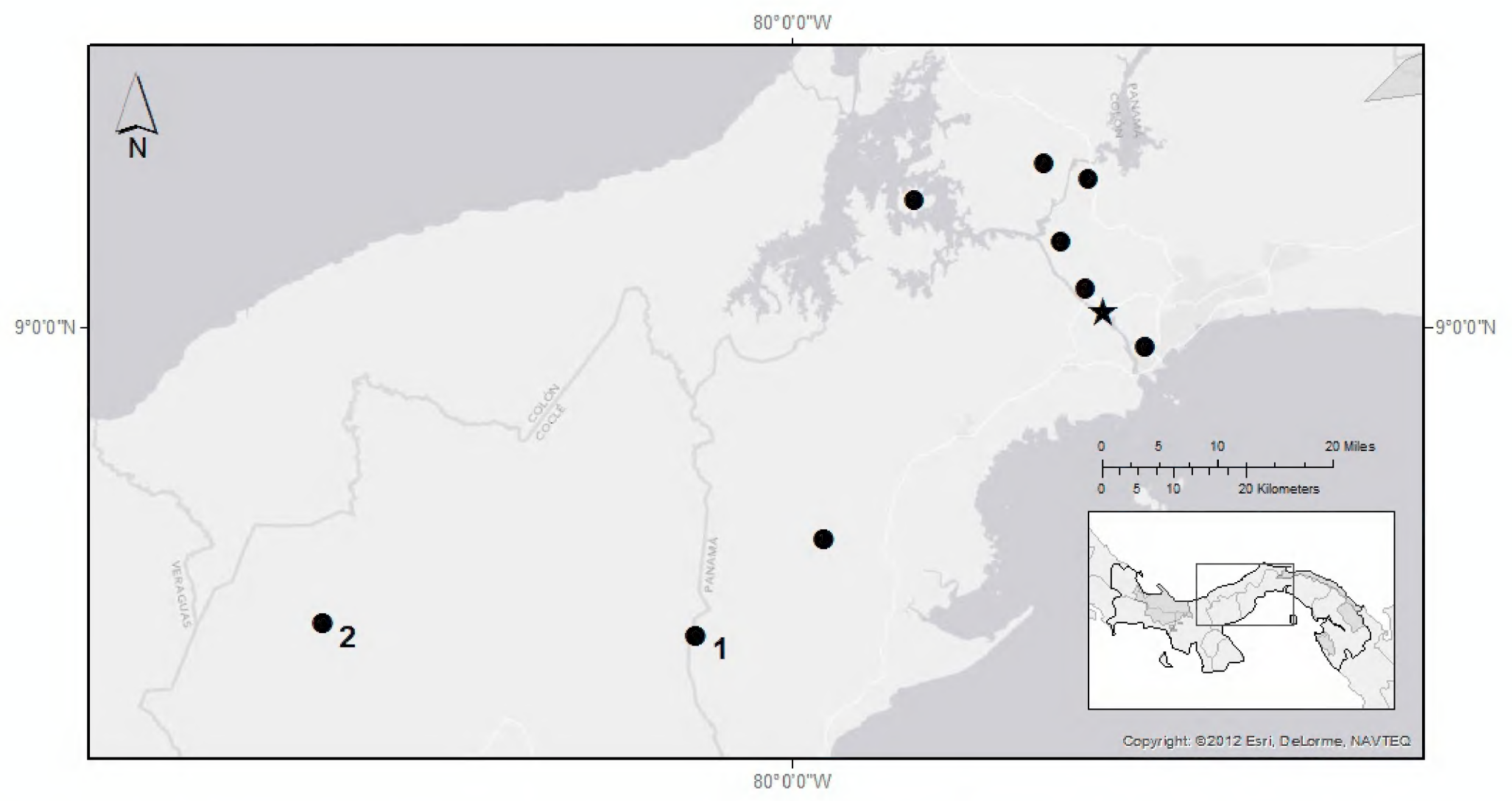

Figure 2. Map of *Trimetopon barbouri*, including holotype (star) from Pedro Miguel, Panamá Province, in addition to other records from the former Panama Canal Zone and Altos de Campaña, Panamá Province, and the two new locations, including El Valle de Antón (Locality 1) and Barrigón in Coclé Province (Locality 2) (solid dots).

Acknowledgments: The authors thank La MICA Biological Station for logistical support and the University of Texas-Arlington, for cataloging of the voucher photographs. Special thanks to P. Santana, M. Pérez, and K. Knight for assistance in the field and laboratory. We thank S. Lotzkat and one anonymous reviewer for their suggestions to improve this manuscript.

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Received: June 2013
Accepted: November 2013
Published online: December 2013
Editorial responsibility: Pedro M. S. Nunes